Reference 69

9532557

Ingleside Properties
C-9467

PETRO PROJECT ENGINEERING, INC.
P. O. BOX 1092 LA PLACE, LOUISIANA 70068 U.S.A. (504) 652 7009

May 7, 1984

Mr. Lawrence E. Pewitt, P.E.
Chief, Mechanical Section
Permits Division
Texas Air Control Board
6330 Hwy 290 East
Austin, TX 78723

RECEIVED
MAY 84

Subject : Ingleside Properties, Inc.
Ingleside, TX
TACB Permit Application

Dear Mr. Pewitt :

We are pleased to submit a permit application on behalf of Ingleside Properties, Inc. This application is for a proposed Drilling Fluids Chemicals Terminal and Oilfield Waste Treatment Plant to be located off Bishop Road (County 148) in San Patricio County.

Enclosed is a check for $1946.10 payable to the Texas Air Control Board to cover the cost of reviewing the permit. This billing fee was calculated based on an estimated total project cost of $1,946,100.00.

If you have any questions, or if we can provide any further information, please do not hesitate to contact us.

Very truly yours,

PETRO PROJECT ENGINEERING, INC.

R.D. Kulkarni, P.E.
President

STATE OF TEXAS
R. D. KULKARNI
49030
REGISTERED
PROFESSIONAL ENGINEER

RDK:r
cc : Mr. Tom Palmer, P.E., TACB, 5602 Old Brownsville Road, CC, TX 78401

INGLESIDE PROPERTIES, I
P.O. DRAWER H
INGLESIDE, TX 7836

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P. O. BOX 1067
LAFAYETTE, LOUISIANA 70502 - U.S.A.

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P.O. DRAWER H
INGLESIDE, TX 7833

LIST OF FIGURES

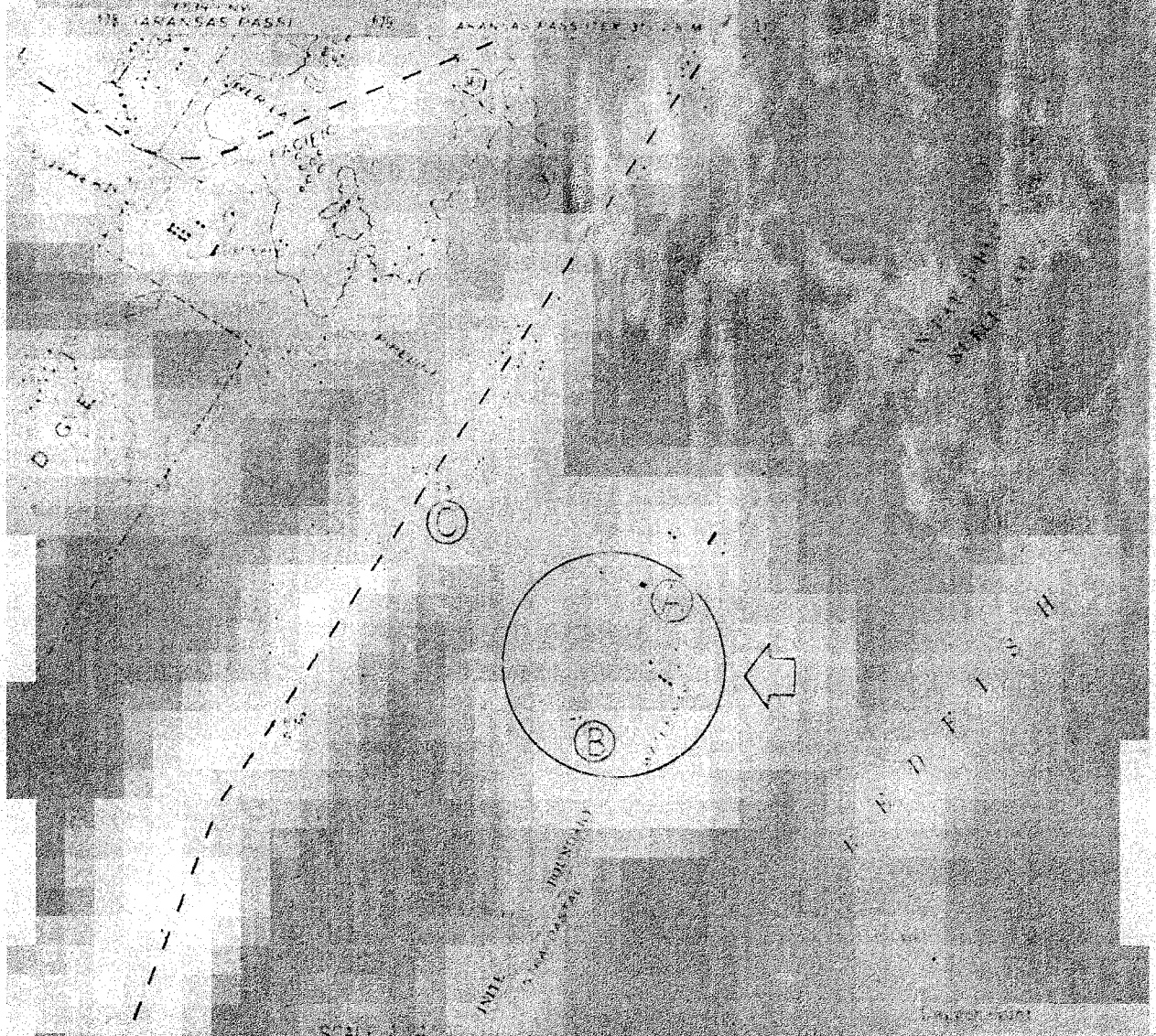
PETRO PROJECT ENGINEERING INC.
P. O. BOX 1062
SAN PATRICIO, TEXAS 78354 U.S.A.

69 003

10/12/2001 TNRCC

INGLESIDE PROPERTIES, INC.
P.O. DRAWER H
INGLESIDE, TX 78362

SITE LOCATION MAP



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PETER PROJECT ENGINEERING INC
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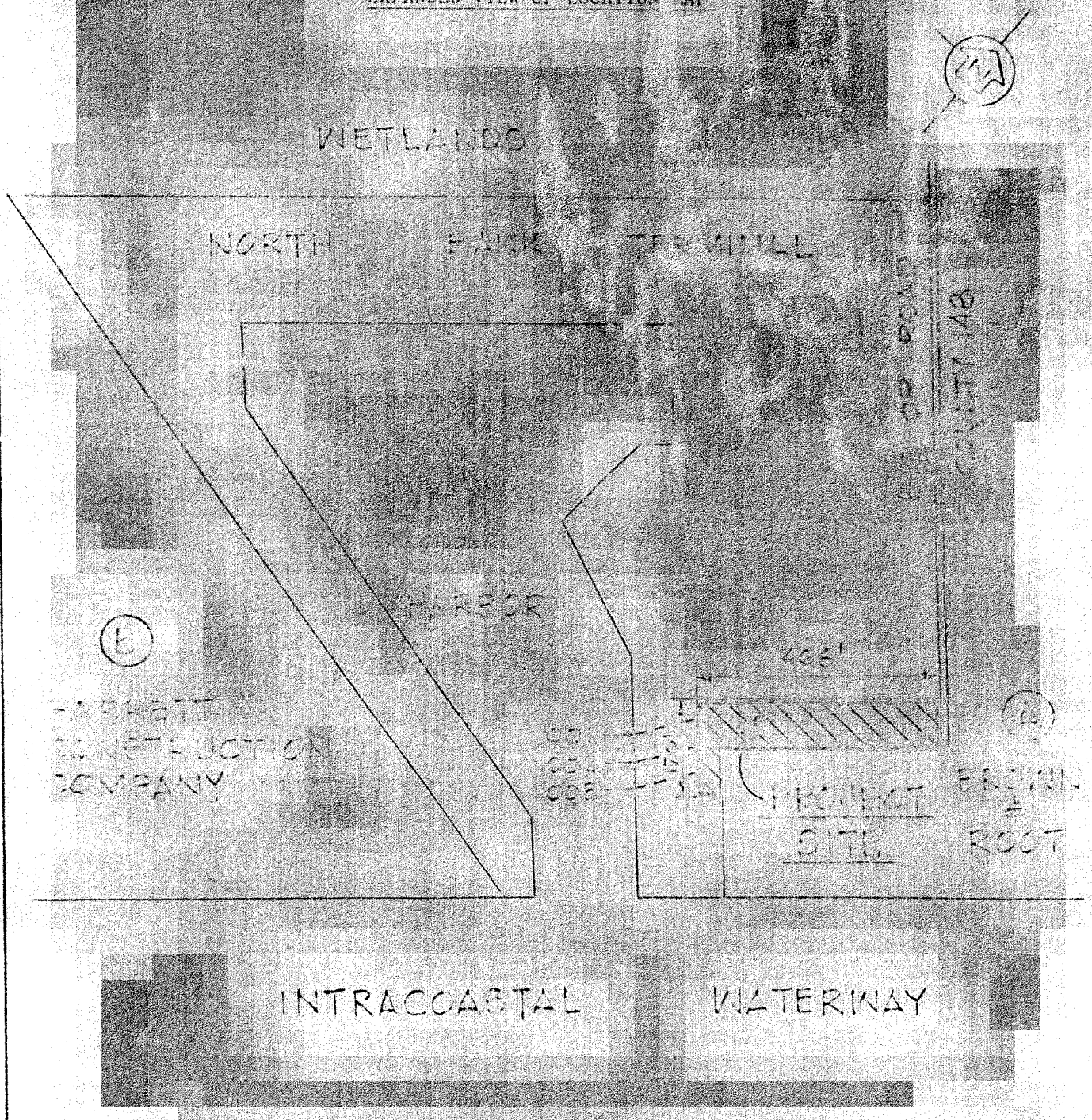
LAFAYETTE, LOUISIANA 70506 U.S.A.
TEL. (504) 232-2000

69 004

10/12/2001 TNRCC

INGLESIDE PROPERTIES, INC.
P.O. DRAWER H
INGLESIDE, TX 783[illegible]

EXPANDED VIEW OF LOCATION MAP



PETRO PROJECT ENGINEERING, INC.
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LA PLACE, LOUISIANA 70068 U.S.A.

69 005

10/12/2001 TNRCC

INGLESIDE PROPERTIES INC.
P.O. DRAWER H
INGLESIDE, TX 78362

INTRODUCTION

In a rotary drilling operation, a fluid known as, called "mud" is circulated from a storage area on the surface downward through the drill pipe, out openings in the drill bit and upward within the borehole to the surface. This returning mud carries with it drill cuttings from the bottom of the borehole. The returning mud along with its entrained drill cuttings is passed over a "shale shaker" before it is returned to the storage area. A shale shaker which is usually located above the mud storage area, essentially consists of a screen that is used to separate the drill cuttings from the mud. The mud passes by gravity through the screen and the cuttings pass over the end of the screen.

Disposal of these drill cuttings is sometimes a problem. In offshore instances, the cuttings are sometimes passed from the shaker back into the water and are allowed to settle to the bottom. However, as is often the case, when a drilling mud system such as oil based mud is used which coats the cuttings with undesirable contaminants, e.g. oil, the cuttings can not be disposed of directly without the risk of polluting the area. In an offshore location, disposal of such cuttings may be similarly difficult with other ecological considerations.

There are two general techniques for treating these contaminated cuttings to make them ecologically acceptable. Either they must be hauled or barged to disposal facility or they must be treated to remove the objectionable contaminants e.g. oil.

Ingleside Properties intends to install an incineration system to treat drill cuttings from on-shore and offshore drill sites. The property, which is located on water front, is convenient oilfield wastes from drill sites in the Texas-Louisiana gulf coast.

A literature search was performed to best represent the feed to the incinerator. Below is one assay of a typical feed to the incinerator:

	lbs	wt %
WET SOLIDS		
Moisture in drilled solids	70.00	2.63
Shales, clay, sand, limestone	1751.00	65.83

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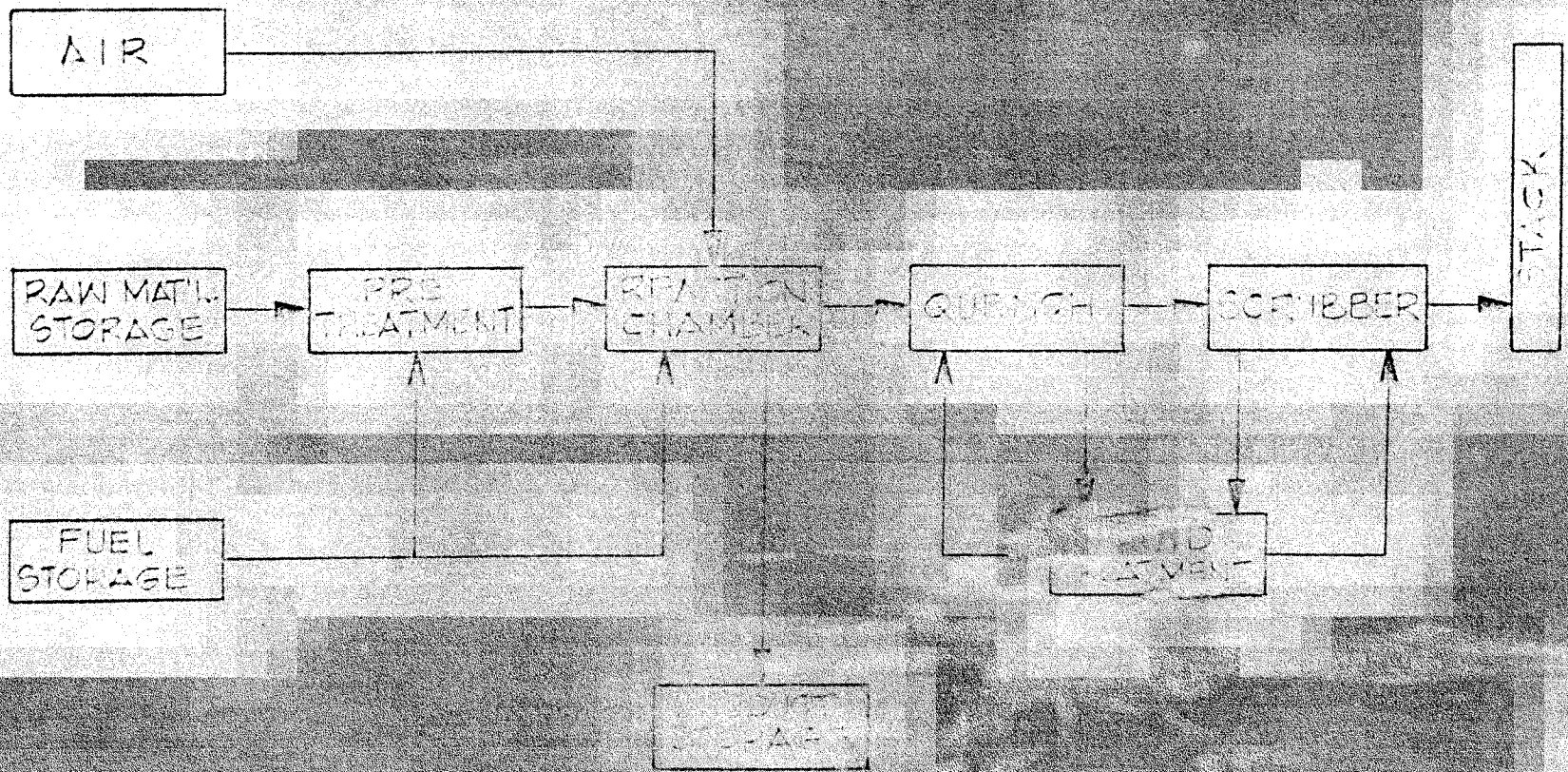
ASSOCIATED OIL MUD

Diesel Oil	27.30	8.65
Water	59.70	1.88
Calcium Chloride ($CaCl_2$)	27.3	0.9
Emulsifier (Soap, Polyamide)	20.90	0.75
Filtrate Reducer (Amine Lignite)	10.00	0.38
Gellant (Amine Clay)	4.00	0.1
Barite	90.00	8.
Total	361.00	20.90

This assay of the feed material was selected primarily because it is representative of a typical such waste and also because it will require maximum solids treatment.



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PETRO PROJECT ENGINEERING, INC.
P.O. BOX 1002
LAPLACE, LOUISIANA 70068
U.S.A.

[illegible] PROPERTIES INC.

[illegible] PROCESS SCHEMATIC
[illegible] WASTE TREATMENT PROCESS

DRAWN BY	SCALE NONE	
CHK'D	DATE 3-22-94	DRAWING NO.

(National) NO. 1856-8½X11

INGLESIDE PROPERTIES, INC.
P.O. DRAWER H
INGLESIDE, TX 78362

PROCESS DESCRIPTION

OIL-FIELD WASTE TREATMENT PLANT

(Refer to Process Flow Diagram Dwg. 3-84-C-102)

The Ingleside Properties, Inc. Oil Field Waste Treatment Plant is designed to treat waste oil base drilling mud and oil-contaminated drill cuttings. These materials are brought to the treatment plant by barge or vacuum truck. The drill cuttings are stored in storage area, SA-1, and the waste drilling muds stored in a tank, ST-7.

The drill cuttings are dumped to the feeding pit for bucket elevator, BE-201 A & B. The bucket elevator discharges to a hopper feeding a screw conveyor, SC-201. Waste oil based mud is pumped from ST-7 to the hopper feeding SC-201 where they are mixed in proprietary proportions. The feed mixture is introduced into the rotary kiln incinerator K-201 after being preheated in heater coil. The vessel shell is fired with natural gas initially and the flue gases are vented to the atmosphere. The air for combustion is supplied by blower B-201. Supplementary fuel oil for combustion is supplied to the burner from storage tank ST-8 by pump P-202.

The hydrocarbons and trace organics are destroyed in the combustion process producing a dry solid residue containing barite and clay minerals. The solids from the kiln are discharged into a residue cooler-conveyor SC-202 where they are air-cooled. These solids are then stored in the residue storage area SA-2 before off-site disposal. The cooling air along with entrained particulates is preheated in this step and used to support combustion in the kiln. The flue gases from the incinerator K-201 are sent via a waste heat recovery system to the wet-scrubber C-201. Here the gases are cooled, SO_2 is scrubbed out and the particulates are knocked down by a caustic solution spray provided by pump P-203 from the recirculating tank below the scrubber. The scrubbed exhaust gases are vented to the atmosphere via stack S-1. When a sufficient amount of residue sludge is built up on the sloped bottom of the recirculation tank it is transferred via pump P-203 to tank ST-7 or to the feed hopper. The scrubbing solution purge is disposed of in a similar manner.

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PROCESS DESCRIPTION

DRILLING FLUIDS CHEMICALS TERMINAL

The Ingleside Properties, Inc. Drilling Fluids Chemicals Terminal consists of Bulk Barite Storage Facilities and Mud Mixing and Storage Facilities.

The Bulk Barite Storage Facilities consist of barite silos, S-1, S-2, S-3 and S-4, a weigh tank, WT-1, and a dust collector, BH-1. The loading/unloading of bulk barite as well as plant transfer is carried out by a closed loop pneumatic system which is vented to the atmosphere via the dust collector, BH-1. This is the only source of minor particulate emissions.

The Mud Mixing and Storage Facilities consist of mud mixing tanks, MT-1 and MT-2, storage tanks, ST-1, ST-2, and ST-3, a transfer pump, P-1. Both oil-based and water-based drilling fluids are handled at the plant. The emissions from this area consist of breathing and standing losses of hydrocarbon vapors from the storage and handling of oil-based liquids.